

# **Technical Bulletin**

**150** 

02/28/2024

# Subject: HQTE-NYISO Chateauguay-Massena Interconnection Operation above 1500MW in the Real-Time Market

Statement: As of November 1, 2006, the HQTE-NYISO Chateauguay-Massena Interconnection was allowed to operate above 1500 MW on a hour-to-hour basis in the Real-Time Market subject to specific ISO system reliability criteria.

## **Details:**

Prior to November 1, 2006, the Hydro-Quebec TransEnergie-New York Independent System Operator (HQTE-NYISO) Chateauguay-Massena 765kV Interconnection Total Transfer Capability (TTC) was limited to 1500MW. The 1500MW limit was based on the impact of higher HQTE-NYISO 765kV Interconnection flows on NYISO voltage and reactive performance as observed in historical Real-Time Market operation. A number of ISO Operating Studies have verified the necessary reduction of NYISO Central-East Voltage Transfer Interface capability at levels of HQ interconnection operation above the 1500MW limit. Accordingly, HQTE-NYISO 765kV Interconnection transfers will be limited to the extent necessary to ensure that NYISO operating reliability criteria are not violated, and to the extent that the transfer capability associated with the Central-East Voltage Transfer Interface is not compromised when needed in Real-Time Market operation.

In order to permit improved utilization of the HQTE-NYISO 765kV Interconnection, the NYISO allows operation above the 1500MW level (up to 1800MW) in the ISO Real-Time Market based on the following considerations, all of which must be satisfied;

- Actual and forecasted ISO voltage and reactive performance as seen within the operating day,
- Status of critical generation and transmission facilities,
- Operation during certain system conditions (e.g. severe weather operation, thunderstorm alert operation), and
- Congested operation that would be a direct result of the reduced Central-East Voltage Transfer Interface limits with HQTE-NYISO 765kV operation above 1500MW.

The NYISO OASIS is used for all notices that HQTE-NYISO 765kV transfers can be allowed in excess of 1500MW. The HQTE-NYISO 765kV Real-Time Market TTC may be increased when the specific operational requirements defined herein have been met. The HAM TTC is evaluated on an hour by hour basis and advance notice for Real-Time Market TTC changes is expected 25 minutes prior to normal in-day transaction submission deadline (75 minutes prior to the scheduling hour).

Operation of HQTE-NYISO 765kV above 1500MW will permit increased scheduling of HQTE wheel-through transactions to PJM, ISONE, and IESO but does <u>not</u> increase the import capability to the New York Control Area (NYCA) since this limit is based on the established NYCA reserve requirement.

The ISO Day-Ahead Market HQTE-NYISO 765kV Interconnection limit will remain at 1500MW.



### **Details:**

This section identifies the specific operational requirements necessary to allow HQTE-NYISO 765kV operation above 1500MW (up to 1800MW) in the ISO Real-Time Market.

# Actual and forecast voltage and reactive conditions:

The following 345kV stations must have actual and expected voltage levels at 352kV or higher prior to initiating HQTE-NYISO 765kV transfers ("HQ transfers") in excess of 1500MW; Marcy, Edic, New Scotland, Leeds, Rock Tavern, Gilboa, Ramapo, Fraser, Gordon Road, Princetown, and Knickerbocker.

At least two (2) of the following static capacitor banks must be available to be switched in service prior to initiating HQ transfers in excess of 1500MW; Marcy bank #1, Marcy bank #2, Edic bank, Fraser bank #1, Fraser bank #2, New Scotland bank #1, New Scotland bank #2, and New Scotland bank #3.

The following dynamic reactive resources must be in service and in normal operation in order to allow HQ transfers in excess of 1500MW; Marcy STATCOM, Fraser SVC, Leeds SVC, and at least three (3) of the five (5) generating units that are identified as follows; Nine Mile #1, Nine Mile #2, Fitzpatrick, Oswego #5, and Oswego #6.

# Critical transmission facility statuses:

All of the 345kV facilities associated with following transmission paths must be in service in order to allow HQ transfers in excess of 1500MW; Marcy/Edic 345kV transmission to Pleasant Valley 345kV, Marcy/Edic 345kV transmission to Ramapo 500kV, Marcy/Edic 345kV transmission to Watercure 345kV, Marcy/Edic 345kV transmission to Clay 345kV, and Marcy/Edic 345kV transmission to the Oswego Complex 345kV.

### Certain system operating conditions:

If the following operating conditions are active, then HQ transfers in excess of 1500MW are not permitted; Thunderstorm Alert, severe weather Operating Conditions, and Solar Magnetic Disturbance Alerts.

### **Congested system operation:**

Sufficient available transfer capability associated with the Central-East Voltage Transfer Interface must be available prior to initiating HQ transfers in excess of 1500MW. Available transfer capability of at least 200MW is necessary to account for; 1) the reduction of NYISO Central-East Voltage Transfer Interface capability for HQTE-NYISO 765kV operation above 1500MW and 2) the expected increase in actual Central-East power flows after allowing increased HQ transfers in excess of 1500MW.

If congestion associated with the Central-East Voltage Transfer Interface constraint occurs or is expected to occur in the <u>current</u> hour ISO Real-Time Market with HQTE-NYISO 765kV operation above 1500MW, then those Real-Time Market transactions (i.e. Hour-Ahead Market transactions that were not scheduled in the ISO Day-Ahead Market) scheduled over the HQTE-NYISO 765kV Interconnection in excess of 1500MW will be immediately curtailed. If congestion associated with the Central-East Voltage Transfer Interface constraint is expected to occur in <u>forward</u> hours of the ISO Real-Time Market with HQTE-NYISO 765kV operation above 1500MW, then the HQTE-NYISO 765kV Interconnection limit will remain at the 1500MW limit for those forward hours.

NYISO Customer Support Technical Bulletin 150 | 2



This Technical Bulletin is not currently expected to be incorporated into a NYISO Manual/User Guide.

NYISO Customer Support Technical Bulletin 150 | 3